The Science of Suicide. See page 276.
Muzzles or Hydrophobia? Which shall it be?
See page 274.

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HEALTH

A WEEKLY JOURNAL OF

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Lie in three words, HEALTH, PEACE, and COMPETENCE."—*Pope.*

EDITED BY DR. ANDREW WILSON, F.R.S.E. &C.

VOL. XIII.—No. 330. FRIDAY, AUGUST 2, 1889. [PRICE TWOPENCE.

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(Signed) GEORGE HENTY, M.D.

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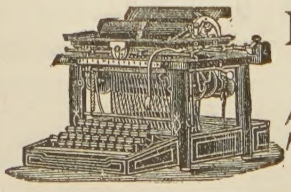

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◆ HEALTH ◆

EDITED BY

DR. ANDREW WILSON, F.R.S.E., &c.

LONDON: *FRIDAY, AUGUST* 2, 1889.

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Notes by the Way

BY THE EDITOR.

"Health is the foundation of all our physical happiness."—*Herder.*

A MEDICAL contemporary says, in answer to an inquiry, that a medical practitioner resident in Guernsey writes that there was a time, not very long since, when the growth and prosperity of the town of St. Peter Port, Guernsey, were attended with the usual insanitary dangers. But of late years much has been done, and is still being actively done, to meet the wants of the population. Good main drains have been in existence for some time, and recently a systematic inspection has been instituted as to the suitable connections of private houses with them. Where such connection was shown to be faulty, compulsion has been put in force, and the evil remedied. The principal hotels took the lead in the matter, and both public opinion and private enterprise have been energetic in promoting sanitary precautions in the lodging and letting houses. The official inspection has now reached a stage at which a visitor can be at no loss to ascertain from official quarters all details of the sanitary arrangements in the house which he proposes occupying. The present water-supply is from public and private wells. These in an overgrown town are not always free from suspicion.

To meet this and other difficulties, the States of the island some time since appointed a public analyst, and this gentleman has already done much good work. The authorities, guided by his reports, have locked up all suspected wells. Such are some of the means taken by a liberal-minded and zealous party in the States for the welfare of the population, and they deserve all praise for their efforts. Guernsey has many natural advantages in the matter of sanitation. Its principal town is built upon the side of a hill, and drains into a channel where the tides rise high and the tidal currents run rapidly. Its streets are swept by the Channel winds, and zymotic disease seldom gains a lengthy footing, even in the poorer districts of the town. The epidemics are so rare as to be historical, and ought in the future to be almost unknown. Phthisis is almost unknown among the better-fed classes, unless in such forms as have an inflammatory origin, and even these are rare. The main trouble among visitors is atonic dyspepsia and constipation. To avoid these inconveniences, the habit of life of the natives should be followed. The country people make numerous small meals, do not eat much animal food, and are early in their morning and evening hours. From Midsummer till the following Easter there are a cool summer, a glorious autumn, and usually a mild winter. From Easter till Midsummer, however loth the resident may be to admit it, Guernsey is not equal to the south of England. As a health resort, Guernsey is certainly gaining ground; but, for all that, it must not be regarded as a panacea for all ills.

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AMONG the many recipes that have been given for overcoming wakefulness, says an author, is one devised by a Mr. Gardner, and formerly celebrated in England, but now almost forgotten. It is to lie on the right side, with the head so placed on the pillow that the neck shall be straight; keeping the lips closed tightly, a rather full inspiration is to be taken through the nostrils, and the lungs then left to their own action. The person must now imagine that he sees the breath streaming in and out of his nostrils, and confine his attention to this idea. If properly carried out, this method is said to be infallible.

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COUNTING and repeating poetry are other means that have been recommended. Combing the hair, brushing the forehead with a soft shaving-brush, or fanning, are all good sleep-inducers, and might well be tried on sleepless children. To these may be added the Spanish practice of getting a baby off to sleep by rubbing its back with

CANCEROUS DISEASES.

TESTIMONIALS.

The following is from Dr. John Sheerer, St. Albans, Sept. 5th, 1888.

MR. JOHN M. YOUNG, *Manager Missisquoi Mineral Springs.*

DEAR SIR,—My mother, Mrs. Susan Sheerer, of Virgil, Cortland County, N.Y., was pronounced by Dr. Brunson, of said town, to have had a cancer in her breast in 1866. She used two cases of Missisquoi Water, and was cured. She is now eighty-two years old, and in splendid health. Yours truly,

JOHN SHEERER.

MISSISQUOI SPRINGS.

[An Extract from "The Monthly Homœopathic Review," May 1st, 1870.]

By Dr. TUTHILL MASSY.

The Missisquoi Springs of Franklin, County Vermont, are at present rather frequently prescribed in England for diseases where the knife was the severe medicine of other days: I therefore deem it my duty to lay before your readers the experience which I have gathered relative to these Springs.

* * * * * * * *

The Spring A, Missisquoi Springs, is the one most generally exported, and which I have frequently prescribed. It gave great comfort to a lady who was suffered from a large open cancer in the right breast; cleansed the surface, relieved the pain, induced sleep, and diminished the tendency to bleeding, when applied externally, like simple water dressing, and taken in half-tumbler doses twice a day.

The benefits of the Spring A were very remarkable in a lady burdened with an ovarian tumour containing much water, with considerable abdominal tenderness. A few bottles always reduced her great size, and relieved her mind from the dread of an operation which was once proposed.

PAMPHLET on application to the Sole Importers—

INGRAM & ROYLE, 52, FARRINGDON-STREET, LONDON, E.C.

AND OF ALL CHEMISTS.

the hand. A sensation of dry, burning heat in the soles and palms, which accompanies certain diseases in some people, is a cause of sleeplessness that will give way to sponging the parts with vinegar and water. Wakefulness is sometimes the result of lack of food, and a glass of cold water or pale ale, or the eating of a sandwich, will, by setting up activity in the digestive organs, divert the superabundant blood from the head, thus removing the cause of the unnatural activity of the brain. One reason why the most-gifted minds have frequently been afflicted by sleeplessness is because bodily exercise is too often neglected by people devoted to intellectual pursuits. For such persons there is no better soporific than muscular exertion, carried even, in extreme cases, to a sense of fatigue.

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In the recently published report of the Statistical Committee of the Asylums Board there appears a most instructive chart giving curves based upon the admissions to the Asylum Hospitals of fevers during the seventeen years ending 1888. The seasonal prevalence of scarlet fever is clearly defined, four times the minimum fell in February, four times in March, five times in April, twice in June, once in September, and once (in 1888) in December. The maximum occurred three times in September, seven times in October, and three times in November.

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The rise and fall of enteric fever is very similar to that of scarlet fever so far as can be known, at all events out of the seventeen years in eleven the maximum was either in October or November. It is difficult to state with the same definiteness the course of typhus, for it has not been epidemic, hence the numbers in each of the seventeen years are small. Typhus arising specially where overcrowding exists, and disappearing on free ventilation, it may naturally be expected to be most prevalent in cold weather, when the classes particularly liable to typhus shut doors and windows, and carefully exclude at night the cold air. Conformable with this theory, the curves show that the maximum was attained four times in December, three times in January, and twice in March. Diphtheria was admitted during the three latter months of 1888, and in future years the diphtheritic curve will be plotted out on the same chart.

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The water supply of Paris is exciting the attention of the municipality. At present it is turbid, and on being kept develops an offensive odour. The typhoid epidemic that Paris suffered from a little while ago seems to have been diffused in a great measure by means of the water supply. Under these circumstances visitors to Paris should drink no water which has not been previously boiled. They should confine themselves to Apollinaris Water, and thus be safe from typhoid fever.

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A test for feigned blindness in one eye is given by a physician. A German factory hand claimed damages for accidental total blindness of the left eye. Experts proved the eye sound by the following test: The plaintiff was asked to read through glasses, the left being clear white, and the right being red, some words written in green on black ground. The man read the writing easily, which he could not have done with any but the eye he claimed was defective, since the red glass adjusted to the right eye would make the green letters appear black, and of course invisible on a black ground.

Original Essays

"Life is not to live, but to be well."—*Martial.*

MUZZLES OR HYDROPHOBIA? WHICH SHALL IT BE?

By C. Marshall.

The great "dog question" is again being fiercely debated. Pasteurites, Anti-Vivisectionists, Muzzlers, and Non-Muzzlers, are up in arms, and one and all discussing the subject from whatever point of view they consider best. Meetings, *pro* and *con*, have been held at the Mansion House, at St. James's Hall, and elsewhere; and various persons of high rank and some learning and intelligence have enunciated their opinions and convictions to somewhat unenthusiastic audiences. The only sensible speech so far has been made by the Prince of Wales, who hit the nail on the head when he emphatically declared "that the only way to check and exterminate the disease of rabies is by stringently enforcing the law concerning the muzzling of dogs."

On the other side, at St, James's Hall certain gentlemen laughed at and made merry over H.R. Highness' statement of fact, and jocularly enquired if foxes, cats, rats, and mice are also to be included in the muzzling laws now directed to be enforced by the Privy Council on and after 30th July. Thenceforward the canine population of the Metropolis shall wear the "horrid," "cruel" muzzles, or in the alternative be "run in," whilst their owners will have to make up forty shillings for Her Majesty's use.

The London County Council have declined the honour and responsibility of seeing these orders enforced, and have endeavoured to shift them upon the authorities of Scotland Yard, who apparently do not care for the job of "dog-catching" in sultry August. Members of Parliament have asked several facetious questions anent the muzzling of our domestic pussies, and the worthy Home Secretary has returned equally facetious replies; whilst another honourable member has ingeniously laboured to show that we cannot possibly extirpate rabies in the dog and hydrophobia in man unless we muzzle all the cats and kittens in London—and presumably all the rats and mice as well. This is rather a far-fetched idea, for though there may be during the year two or three (and it is very doubtful if any such have ever occurred) isolated cases of rabies in the cat, none have ever been proved. At all events, cats do not, unlike dogs, usually attack and bite human beings; if there are any cases of cat-madness, they are all consequent on, and the result of, injuries inflicted by rabid dogs on pussy.

Next, the presiding genius of a London Sunday paper, chiefly dedicated to prize-fighting, horse-racing, and the drama, has furiously attacked would-be muzzlers, the Prince of Wales, and the authorities generally. Wholly denying the existence of hydrophobia as a disease (he calls it "hysteria resulting from fear"), he boldly challenges the entire medical fraternity of the United Kingdom to point him out a single instance even where any person had died of hydrophobia. It is unnecessary to state that hydrophobia has been known as a disease for centuries; it is no novelty. It has been recognized as a distinct disease by medical men of repute all

over the world. This sporting editor really goes to the extreme limit of absurdity, irrationality, and sentimentalism when he attempts to deal with a subject beyond his ken, and which he knows nothing whatever about.

Finally, a reverend gentleman at one meeting vouchsafed the curious item of information that it was not the bite of the dog at all, but the saliva of the dog when rabid that produced the disease and communicated it. As to this, it is well known that unless a wound is first inflicted by a rabid dog's tooth, and the saliva and virus in it thus gain admission to the system, no harm will be done. In fact, a mad dog may lick your hands and face, and so long as he was thoughtful enough (which he would not be) *not* to use his teeth, you would be no whit the worse for his attentions to you. Further, many lives have been undoubtedly saved by persons actually sucking the poisonous saliva out of wounds inflicted by rabid animals, and no injury has resulted to such persons.

As to muzzling other animals, cats, as a rule, do not bite their masters or mistresses; nor do foxes, rats, or mice wander about our London streets and country lanes seeking whom they may get a snap at. No doubt, the sewer-man, the storekeepers at the London Docks, and the gentlemen who follow the lucrative profession of rat catchers can enlighten the reverend gentleman as to whether or not they have ever come across a mad rat in their ambulatory excursions underground; or if they have ever experienced any evil result from a bite, since they must have been favoured with plenty of such injuries. Did anybody ever hear of a mad mouse? A rabid fox is a rarity; and how many foxes shall we meet in a week's stroll through our streets? The anti-muzzlers have a very poor case indeed—in fact, they have none at all. There is no doubt whatsoever, and the evidence is absolutely conclusive on this point, that rabies in the dog *can* be wholly and entirely stamped out in this country by a system of universal muzzling of all dogs for a definite period—whether nine or twelve months is not material. In addition to this, the importation of dogs from abroad must be prohibited.

France and the continent cannot do without M. Pasteur, and they are welcome to his undivided attention. England has a natural frontier, the sea; and this no animal can cross. France, Germany, Russia, Austria, &c., have no such barrier; there can be no rabies without the bite of a rabid animal. Rabies does not originate spontaneously. Do away with the *possibility* of this bite, and you *must*, within a certain fixed period, stamp out rabies *in toto*. The disease cannot exist when there are no longer means for its existing and being spread from one animal to another. It is surely far better for every dog, great or small, to be muzzled for twelve months, aye, or destroyed altogether, than that one human being in England—man, woman, or child—should fall a victim to that most awfully hideous disease of hydrophobia. What are all the dogs in England compared to one human life? Nothing—absolutely nothing.

The partial muzzling that we have had here in London has been useless, or nearly useless. And why? Because whilst a certain section of the metropolitan area was brought under the Police Orders of the City of London, almost the whole of provincial England was exempt, and rabid dogs could, and did, wander unmolested about the City of London and about the country roads, spreading the disease far and wide. At Nottingham, where muzzling was stringently insisted on in 1886, rabies was exterminated; previously there had been many cases. The annual death-rate in Prussia from hydrophobia during the first decade of this century amounted to 166, when no control of any kind was exercised over dogs, and when, be it noted, the human and canine population was much less than at present. Since the muzzle has been imposed the annual death-rate in the decade ending 1887 has fallen to something less than five.

Further, while only three deaths have taken place in Prussia since the end of 1884, ninety lives were lost by hydrophobia in 1884 and 1885 in England alone, and a still larger number since 1886. In Austria, the disease has been almost stamped out owing to the precautions adopted; whilst in Norway and Sweden, by the use of the muzzle and stringent regulations against importation, rabies is now a rarity. A few years ago, when there was no muzzling, the disease was rampant. Now, if European countries can, with all their disadvantages as to frontiers, show such good results, is it not certain that England can altogether stamp out the disease by observing the very same regulations?

As to the sentimental outcry raised by some shallow-minded men and women against the use of the muzzle, it is absurd and irrational, and, indeed, nonsensical in the highest degree, at the very most. Some very trifling inconvenience may at first accompany the use of the muzzle. Dogs easily become accustomed to a suitable form of it, and the "sentimentalists" might as well say that it is a cruel thing to put a bit in a horse's mouth. The fact is that the cry against the muzzle is raised almost entirely by those whose first thought is only of their own selfish pleasures and interests. They all allege that the muzzle will not stamp out rabies, but will stamp out sport, and that their pets will be "tortured" and driven mad. Well, there is no instance yet recorded of a healthy dog going mad from anxiety to get his muzzle off his head. The dog can eat, can drink, can breathe, bark to his heart's content, snarl if he chooses; but he cannot bite once his muzzle is fixed. It is this *bite* that does all the mischief, and creates the necessity for a Pasteur Institute abroad. We do not want Pasteur or his Institute; we should not need his services in any way if common sense could be but instilled into the brain-pans of our legislators. The Privy Council say that they have no powers to enforce an universal muzzling through the kingdom. The sooner Parliament gives such powers, the better it will be for mankind. When this is done, a "mad dog" or a case of hydrophobia in man will be of necessity an impossibility in England after twelve months; and then, and not till then, we can take the muzzles off our dogs, confident that rabies having been stamped out of the country, and excluded from re-admission, we need not further concern ourselves about this difficult dog question—unless, indeed, the disease can originate *de novo*, and for this belief there is at present no sanction at all.

The efficiency or inefficiency of M. Pasteur's treatment need not then concern us. He will not be troubled with any more British patients, and there will be no necessity for getting up a subscription fund on behalf of the French *savant*, who can continue his experiments on his own countrymen and other persons resident on the Continent, who have unfortunately been the recipients of that "bite" which in every case is necessary to induce rabies in man, whether it does so or not depends on a variety of circumstances. Certain it is, that a dog once muzzled, rabid or not, is powerless to do evil amongst friends or foes, human, canine, or feline.

THE SCIENCE OF SUICIDE.

By Dr. E. J. Dungate.

(Concluded.)

The statistics of suicide are interesting and suggestive. Was Young right when he exclaimed in his *Night Thoughts*—"O Britain, infamous for suicide"? Montesquieu, who studied suicide with enthusiasm, spoke of England as the "Land of Suicide," on account of its fogs and cold climate. Was he right?

There are some difficulties in the way of getting a precisely accurate suicide-rate; for example, it is highly probable that very often when the verdict "Found dead" is returned, the case is one of suicide. In spite of that, however, there are some general facts which cannot be questioned. Amongst the European races, it is the Germanic which shows the highest suicide-rate. Judging also from statistics returned by some of the colonies, it would appear that when the Germans emigrate they carry with them this high suicide-rate. They kill themselves more often than do men who are of the Anglo-Saxon race. The ratio amongst Scandinavians is very large; in fact, near to that of the Germans, and also, of course, greater than that among the Anglo-Saxons. Amongst the Celtic races the tendency to suicide is not great, for the rates in Wales and Ireland are very low. The lowest rates are found among the Finns and Lapps.

It is worthy of notice that in mountainous countries the rate is very low. It is low in the Highlands of Scotland, and in the most mountainous parts of Switzerland suicide is almost unknown. From careful examination of recent tables of statistics it is quite clear that the consideration of race is more important than that of climate or geographical position. It is an old opinion that suicides are most frequent during the foggy and damp weather of November. This is quite wrong. Strange to say, the rate is at its minimum in the months of November and December, and reaches its maximum in June. The climate of Holland is still more gloomy than that of England, and suicide there is comparatively rare. During the hottest weather and during the coldest weather the rates are lowest; not the death-rates indeed, but the voluntary death-rates.

The highest rates in England are shown by those counties which lie within what has been termed the London area. Middlesex heads the list with one hundred and five per million, and Kent comes next with ninety-seven per million. When one considers how keen is the struggle for existence in that mighty Metropolis, where some, indeed, become very wealthy, but hundreds of thousands must ever want; that there the law of the "survival of the fittest" is carried out with desperate severity, and the weakest must go to the wall; that want and misery must be the more bitter to poor sufferers, because they are in the midst of the glare and splendour of wealth—is it is surprising that the rate there is high? Think of Chatterton—

> "Homeless, near a thousand homes he stood,
> And near a thousand tables pined and wanted food."

The utter inability to cope with the difficulties of life is often followed by a hope, which in turn fosters a belief, that death is an eternal sleep. One quick thrust, or one swift plunge into the dark water, and the rebellious heart is at rest.

> "Our orthodox coroner will doubtless find it a *felo de se*,
> And the stake and the cross-road, fool, if you will;
> Does it mattter to me?"

Further, a glance at the statistical tables is sufficient to show the truth of the popular supposition that suicide is more prevalent among the educated than among the uneducated classes. The countries in which the standard of culture is the highest show the greatest number of voluntary deaths. What fact so sad? What does it profit us that "the thoughts of men are widened with the process of the suns?"

With respect to religions, it is beyond all doubt that the highest rates occur among the Protestant sects, and the lowest among the Jews, although there is more insanity among Jews than Christians. Protestants not only have a higher suicide-rate than Catholics, but also suffer more from religious mania. These results ought to have the serious attention of all Protestants who are engaged in religious education.

It is almost superfluous to remark that the crime is more frequent among men than among women. Taking nearly all the statistics which can be procured, the ratio is approximately three to one, but in the largest cities about two to one. The greater burdens of life have to be borne by men, and they more readily yield to despair. Women exhibit a far greater power of adaptation to circumstances, and though physically weaker, show that they

> "Know how sublime a thing it is,
> To suffer and be strong."

When they are driven to suicide it is generally by shame or remorse, and not by money difficulties, nor by vice.

Concerning the effect of employment, it is found with respect to England that the rate is highest among soldiers. Next come servants in inns and hotels, and then innkeepers and hotelkeepers. After that we have in order—medical practitioners, druggists, lawyers, butchers and fishmongers, clergymen, shipwrights and shipbuilders, miners, &c. Ultimately we notice the rarity of the crime among those who are engaged in heavy manual labour. Let the work be regular and healthy, and those who are engaged in it, *cæteris paribus*, are not so abnormally sensitive to all the carking cares of life.

The methods used are generally those which from the nature of circumstances suggest themselves, or those nearest to hand. A soldier generally chooses death by firearms; medical men and druggists select poisons; and generally speaking photograpers swallow cyanide of potassium, which is used in their work; servants often use oil of bitter almonds, which is used for cooking purposes, or a "vermin killer," which is commonly a preparation of strychnia. Throughout Europe hanging is the most common method adopted; yet, although more women choose hanging than drowning, they are much fonder of drowning than the men are; men have a greater preference for hanging. The number of women in Europe who drown themselves each year is always double that of the men. In England and Ireland cutting the throat is about as common as drowning, but on the Continent far less common. The principal methods used in Britain, in order of their frequency (with only occasional variation), are—hanging, drowning, cutting, poisoning, shooting, suffocating, and falling.

Since the greater spread of railways the number of persons throwing themselves under trains has been very greatly increased. Some of the ancient methods, however, are almost obsolete: for example, such as starvation and opening of the veins. The suicide of Abdul Aziz (1876) is a recent example of vein-opening. With respect to very rare methods, we have the case of Portia, who swallowed red-hot coals; of Cleopatra, who is believed to have used either an asp or a poisoned bodkin; of an Englishman, in 1820, leaping into the crater of

Vesuvius; and of two persons in 1881, blowing themselves up with gunpowder, and another killing himself by eating horsehair.

It is the opinion of some that legislation is quite useless as a deterrent against suicide. Forbes Winslow says, "It was clearly established that before the alteration in the law respecting suicide, the fear of being buried in a cross-road, and having a stake driven through the body, had no beneficial effect in decreasing the number of suicides." The statement must be received cautiously. It is an historical fact that, at least in the case of several suicidal epidemics, legislation has been most effective. It is astonishing in how many families insanity is hereditary; and, consequently, how many men are on the borderland of insanity.

"'Tis a mad world, my masters!"

In a country where semi-patriotic notions concerning the "liberty of the subject" are clung to with such tenacity, it is rash to hint that persons who can only bequeath a legacy of disease to posterity should be deterred from marriage; but some such system must be adopted if there is ever again to be in Europe a race of Spartans.

Mere education is of no avail. Mental tension is a constant *cause* of suicide. The great preservative against suicide is the *mens sana in corpore sano*. Competitive examinations and solitary study, without regular open-air exercise; a continuous straining towards a goal which, when reached, yields no reward—these are the constant causes of nervous break-down. The prescription of nervine tonics is not what is wanted, but merry companionship, change of scene, the bracing air of the mountain, and—

"The innocent sleep;
Sleep, that knits up the ravelled sleeve of care."

It seems cruel to the self-sacrificing teachers of religion to say that religious teaching is not what it might be; that some forms of revivalism are hurtful to enfeebled minds; that all religious extravagances are injurious; and that violent emotions lead to violent deeds. This is too true. The teaching which leads to remorse and despair is exceedingly harmful. The lines in Tennyson's "Despair" come to our recollection—

"And, yet—I have had some glimmer at times in my gloomiest woe
Of a God behind all—after all—the great God, for aught that I know.
But the God of love and hell together—they cannot be thought."

For feeble minds it would be better were there less idealism, more reference to actual life-work, and the teaching of principles which inspire men with hope.

Useful Cements.—For mending valuable glassware, use a cement made with five parts gelatine to one part of a solution of acid chromate of lime. Cover the broken edges with the cement, press the parts together, and expose to sunlight. The light hardens the cement, which will then withstand boiling water. For sticking leather, paper, or wood to metal, use glue to which has been added a little glycerine—say a teaspoonful of glycerine to a gill of glue. This is a good cement for fastening labels to cans.

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Personal Health

"Be timely wise;
With health all taste of pleasure flies."—*Gay.*

THE HAIR.

VI.

Why the human fancy should ever have been taken with white hair upon the head it is difficult to understand, for white hair is an indication of old age. Not that one whose hair is white in youth will be necessarily more short-lived than another, but *pari passu* grey hair is an evidence of senility. When the hair turns white in youth it is an indication that in one particular at least the man or woman is prematurely old.

In the days when wigs were worn, the disposition was to have the hair upon the head white, and now when the hair becomes white the longing is to restore its pristine colour. The cause of the hair turning grey is supposed by some to be the presence of air in the hair, and by others an alteration in the colouring matter. Hair, we know, has turned white in a single night. Brown Séquard marked certain hairs in his beard, and found that some of them turned white in the course of a few hours. History tells us that the hair of Marie Antoinette whitened in a night, as did also that of Sir Thomas More before his execution. A case is recorded of a gentleman between forty and fifty years of age getting married, and returning home from his wedding tour with his hair as white as snow. Some twenty years ago a case was reported by Dr. Landois where the hair turned white in a few hours, and when examined microscopically was found to contain air globules, but there was no loss of colouring matter.

Disease, and pain, and poor health hurry on whiteness of the hair. The writer has seen many a case of neuralgia on one side of the face accompanied by whiteness of the beard and hair on the same side only. Sometimes neuralgia will turn the hair white, and when the neuralgia abates the whiteness disappears. Surgeon Parry relates a most striking case of a rebel Sepoy, who, while under examination, was so shocked with fright that his hair turned grey within the space of half an hour.

When wigs came into vogue, they were supposed to give a dignified and imposing appearance to the wearer. They were composed of hair whitened by exposure on the grass to the sun's rays, and by being soaked in a lixivious water; but it was found that after a time this silvery whitened hair assumed a dead and ashen hue. To overcome this drawback the wigs were powdered, and so "hair-powder" was introduced. In the beginning, starch is said to have been the only material used, but after a time the powder contained an admixture of alabaster, chalk, gypsum, &c.; but against the admixture the statute of George II. contains a prohibition. The last king who wore a powdered wig was George III. The lawyers alone keep alive the well-nigh extinct custom now.

We read that "Paris set the fashion, afterwards adopted in England, of greasing these wigs to enable them to retain much larger quantities of powder. But during the reign of George II. these unhealthy encumbrances fell gradually into disuse, surviving only within the precincts of our courts of law. In its last fight for existence the greased and powdered wig found its staunchest friend in the physician, who remained true to it up to the middle of the eighteenth century. In its

place came the frizzled hair and powdered heads, dressed *à la mode de Paris*, which became so fashionable in England among all ranks of people, that in seasons of scarcity of bread-corn the evil was held to be attributable to the great quantities of wheat manufactured into starch for hair powder. And hence, in 1795, Mr. Pitt was led to look to this article as a proper one for taxation. This step tended greatly to check its general use, and English ladies began to appear on public occasion with their hair in its natural state, a good example which was speedily followed by the other sex."

Despite the unhealthy and injurious fashion of wearing the hair in the present day amongst ladies, it is far in advance of that of other days, for at least it is not uncleanly. Whatever else may be said, cleanliness of the hair is advocated upon all hands in the present day, and this notwithstanding hair-dyes, pomades, and all the rest. A soap that has been introduced, as much with the view of being suitable for the hair as for tender conditions of the skin, is "Vinolia" Soap, which contains some plastic emollient matter to neutralize any soda or potash, and prevent the injurious action upon these tissues. It is the only soap for a shampoo.

LOW LEVEL HEALTH RESORTS.—Attention has lately been called by Dr. Lindsey to the therapeutic value of regions below the sea level, for asthmatical or consumptive patients, who there have continuously higher atmospheric pressure than at the sea level. Excellent effects have been thus obtained in the valley of Conchilla, near Los Angeles, in California, about 273 feet under the sea (barometric pressure only about 7 mm. higher). The most noteworthy place of the kind on the earth's surface is probably the Dead Sea district (1289 feet), and the following are some others: Lake Asal in East Africa (639 feet), the oasis of Araj in the desert of Lybia (270 feet), the Arroyo del Muerto in California (230 feet), the oasis of Siwah in Lybia (123 feet), the borders of the Caspian (86 feet).

AN AMERICAN TENNIS-DRESS.—Here is a description of the tennis-dress prepared for a young lady who means to spend her summer at Newport. She wears with it a divided skirt. There are a pair of green silk stockings to begin with, embroidered with buttercups and finished off with a little pair of pig-skin shoes. After these are on, the wearer will array herself in an under-garment of gray-green China silk, which looks like a petticoat, ruffled up to the waist, but which really consists of two petticoats, one for each limb, and fastened to one belt, which gives her a freedom of movement she has never known before since she went out of short frocks. A little low-necked silk bodice goes with the divided petticoat, and this is frilled with lace, and drawn up with little narrow green ribbons about the shoulders and arms. The tennis-dress proper is of grey-green serge, laid in a deep hem about the foot of the skirt, and embroidered with a deep border of buttercups done in a gold-coloured floss. The skirt is gathered quite full, and falls just the fragment of an inch below the ankles. The waist is a loose blouse of the Garibaldi shape, made of white serge, with a turn-over collar, under which is knotted a yellow silk scarf, the same colour as the broad soft sash, knotted about the waist. The sleeves are loose and full, and are gathered into a deep green cuff which reaches nearly to the elbow. Over this blouse goes a little green serge jacket, whose edges are embroidered with buttercups, which is lined throughout with silk of the same shade, and has no sleeves. The hat is a sailor-shape of white straw, trimmed with green ribbons and a bunch of buttercups.

HOW TO GAIN IN WEIGHT.

ALBUMEN (*i.e.*, materials like meat, gluten, casein, white of egg, &c.) is the food which makes flesh, and a certain amount of it is made up in the system every day, no matter whether any of it is taken or not, and no matter whether work is done or not. It seems, then, that albumen is most closely associated with the vital processes, and a man will die sooner when deprived of meat than of any other food.

Now, to increase the flesh a full supply of such food as meat, gluten, &c., is absolutely indispensable, and, if it be given with plenty of fat and starchy or saccharine food, will increase the weight. In low states of disease the most useful food is meat, but as the ordinary meat-teas do not contain the nutritious part of the flesh, zymine should be employed to digest out the insoluble ingredients.

A practical question is,—Why do people who are taking a goodly amount of cod liver oil grow thin? It is because they take too little meat. To do most good, oil should be combined with farinaceous food, as butter on bread. The endurance of fat-eating people is proverbial, and no other food will yield the force that fat will. Therefore it is that in wasting diseases recourse is had to cod liver oil. Because the oil has been given as a medicine it has oftener disagreed than it would otherwise have done.

The new form of cod liver oil may be counted among the more recent medical innovations. Formerly it was the custom among physicians to prescribe this oil in emulsions. These emulsions were manufactured with alkalies, which, with essential oils, made them soapy or heavy, and, therefore, bad for the stomach. Now it is the order of the day to give cod liver oil with a food, such as malt extract, and not with drugs. Consequently, a revolution has taken place in the dietetic treatment of consumption, scrofula, &c.

The initiative of all this was the discovery that cod liver oil could be dissolved in a good malt extract, and the Kepler Solution of Cod Liver Oil in Extract of Malt is now prescribed by physicians everywhere. It will fatten where cod liver oil would do no good, and where the person does not seem to be gaining so fast as is desired, see that plenty of meat is allowed, and success is morally certain; that is to say, there will be increase in flesh and fat, consequently, gain in weight.

POISONOUS COOKING UTENSILS.—Copper cooking vessels, when insufficiently cleansed, are a special source of danger, and their use may even be attended with fatal results. The Hereditary Duke and Duchess of Oldenburg, in common with a number of other passengers on a voyage from Bombay to Calcutta, suddenly fell ill, the symptoms being those of metallic poisoning. Most of the passengers recovered under medical care, but seven of them, it is said, actually died, and some others were for a time in serious danger. As the result of a searching investigation, which was at once set on foot by the captain of the steamer, little doubt was felt that the poisoning was due to gross negligence on the part of the cook, who prepared the passengers' meals in copper vessels insufficiently cleansed.

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In looking forward to the annual flight from the stifling heat of the city, and the disease-engendering germs which it develops, the question of where to go is greatly influenced in its solution by consideration for the welfare of the children of the family. Shall we go to the mountains or to the sea-shore? Shall we be led captive by visions of mountains, and rocks, and green fields, reinforced by prospective fresh eggs, and milk warm from the cow, and golden butter made under our very eyes; or shall we listen to the persuasive voice of the waves toying with the beach, and imagine that we might hear mingling with it the happy clamour of the little people as they frolic on the sands, crowding more of gladness into a single hour than comes to them in the whole winter in the pent-up city. Both prospects are attractive; and it is hard to choose between them. Perhaps, when it is practicable, the better plan is to divide the season between the rival claimants, and to try to get from each the special advantages which it affords.

To those who take their children to the sea-shore a word of advice may not be unwelcome from one who has seen much of sea-side life, and noted the dangers, as well as the benefits, which may accrue from it to the junior members of the family.

And first as regards proper protection against cold. It must be borne in mind that a fall of temperature, which may be scarcely noticed by an adult, may be of very serious moment to a child. The reasons for this are obvious. His circulation is more rapid, and blood chilled at the surface finds its way much more quickly to the vital organs. These organs are more delicate, and are not protected by such a mass of tissue outside of them as in the adult serves the purpose of wraps and mufflers. Then, unfortunately, the artificial protection in the way of clothing which fashion prescribes for adults is in great measure denied by fashion to the little ones who have the greater need for it. Bare legs and arms, with the scantiest possible covering for the trunk, while no doubt exciting the envy of elders, who, at a temperature of 90, are starched and laced up to the point of conventional misery, are yet fraught with danger when a sudden gust from the ocean sends the mercury down a dozen degrees in twice as many minutes. The result of such a change is more apt to be felt in bowel troubles, than in what is recognized as a "cold." The child has, perhaps, taken a full meal, and digestion is going on finely, when suddenly the surface is chilled; the blood is driven into the interior of the body, congesting liver, stomach, and intestines; digestion stops; the undigested food fermenting, colicky pains are followed by diarrhœa; and days of suffering for the child, and of anxiety for the child's mamma, are the necessary sequel.

Now, the remedy for this is not to keep the poor child swathed in flannels, in which during the greater part of the day he will almost swelter, but to provide a light woollen wrapper reaching from neck to heels, which the nurse is to take out with her, and which is to be put on whenever a chill is felt in the air. If the nurse cannot be trusted to do this, strangle—no, give her a "character" for perfect reliability, and get some one you can rely upon.

When cold storms occur, as they are apt to do occasionally at all our sea-side resorts, the room should be dried by means of a little steam heat, or, what is better, an open fire. During such weather small children should be kept indoors. The piazza is no place for them.

Then as regards food. Children old enough to run about are apt to develop ravenous appetites under the stimulus of the salt air. If not looked after they are likely to eat too much, even of wholesome food. And if in addition to over-feeding the quality of the food is defective, the way is open to no end of trouble. Hotels within reach of the cities often get their supply of milk and fruit, in part at least, from the great markets; and the articles are even less fresh than those consumed in town. This should be carefully looked into, and the milk especially should come from the immediate vicinity. But no fallacy is greater than that involved in the idea of "one cow's milk." If it were possible to obtain milk always from the same cow, it would be of less even quality than the mixed product of a whole dairy, since it would change with the varying conditions of the individual animal, while no cause would be likely to produce a proportionate effect upon the whole herd. Good milk should furnish the basis of the child's food, and the simpler the additions made to this the better.

Much injury is done to children by injudicious sea bathing. No child under five years of age ought to be taken into the water. For younger children, if salt-water baths are deemed desirable, water should be carried to the house, and the bath should be given in a tub. Quite young children, who are afraid of the ocean, are often seized by thoughtless persons and carried out into the breakers, no heed being paid to their pleadings and struggles. The proceeding may inflict an injury upon the child's nerves which time will not repair. Such a bath as is sometimes administered to refractory prisoners at Sing Sing would be a suitable argument to address to one possessing so little sense and so little humanity as to subject a child to such torture.

The length of time during which a child may properly remain in the water cannot be arbitrarily fixed. Much depends upon the temperament of the child and the temperature of the ocean. The stay should not be so long that the bather comes out cold, blue and shivering. A prompt reaction is essential, not only to benefit, but also to safety. From ten to twenty minutes is long enough. Two hours should elapse after a meal before going into the water.

The ear-drums of children more than those of adults are exposed to injury from the shock of breakers dashing against the side of the head. This is due to the auditory canal being relatively shorter and wider. Hence on the approach of a wave the ears should be protected with the hands. A still better plan is to put a little cotton into each ear before the bath, taking care to remove it afterward. This has the further advantage of preventing sand from getting into the ears, an accident which often occasions some annoyance.

The delicate skins of children are sometimes very much irritated by contact with the different species of jellyfish brought in by certain of the ocean currents. I have seen quite formidable and persistent eruptions occasioned in this way. When these creatures are unusually abundant in the water, bathing had better be deferred until a change of the current carries them away again.

The reflection of the sun's rays from the sand on the

beach is extremely trying to the eyes, and in delicate children sometimes induces a mild grade of inflammation. This can generally be relieved by bathing the eyes with weak alum water. Nurses should see to it that the backs of their little charges are turned to the sun when they settle themselves down for a good dig in the sand. If their necks and arms become sun-burnt, nothing will allay the irritation more nicely than bathing with a solution of carbolic acid in water; a teaspoonful to the pint.

At the sea-shore the diurnal variations of temperature are less than in the mountains. The fall of the mercury as night approaches is not so marked. Nor is it so cool relatively in the early morning. This difference, more notable in the late summer and early autumn, makes it practicable at the sea-shore to keep children out-of-doors a greater portion of each day than would be safe in the more elevated regions in the interior.

A word as to the time when children may be brought back to the city without danger from the heat. Speaking for New York City, I should say that the danger is as great up to the middle of September as at any previous time. This fact has been recognized during the last few years in the later opening of the public schools, the change being made from the 5th of September to the 12th. In fact, as a rule, it would be better not to take young children back to the city before October 1st.—*Babyhood.*

Treatment of Snake-Bite.—When a person is bitten by a poisonous snake, send at once for the doctor. Pending his arrival, apply a ligature, made of a piece of cord, round the limb or part at or about two or three inches above the bite. Introduce a piece of stick or other lever between the cord or part, and by twisting, tighten the ligature to the utmost. Apply two or three ligatures above the first at intervals of four or six inches, and tighten them also. After the ligature has been applied, scarify by cutting across the puncture to the depth of a quarter of an inch, with a sharp penknife or other cutting instrument, and let the wounds bleed freely or, better still, excise the punctured and poisoned part. Apply either a hot iron or live coal to the bottom of these wounds as quickly as possible, or some carbolic or nitric acid. If the bite be not on a finger or toe, or on a part where the ligature can be applied, raise up the integument with the finger and thumb, and with a sharp penknife cut out a circular piece as big as a finger nail round each puncture, *i.e.*, round the points of the finger and thumb—to the depth of a quarter of an inch. Then apply the hot iron to the bottom of the wounds, and wash the part with solution of permanganate of potash. Give fifteen drops of liquor ammonia, diluted with water, immediately, and repeat it every quarter of an hour, for three or four doses or longer, if symptoms of poisoning appear; or give hot brandy or other spirit, with an equal quantity of water, about an ounce of each for an adult, at the same intervals. Should no symptoms of poisoning come on in half an hour, the ligatures should be relaxed, or the part will perish from gangrene. If depression, faintness, nausea, hurried respiration, and exhaustion supervene, the ligature should not be relaxed until the person is recovering, or until the ligatured part is cold and livid.—*Book of Health.*

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THE SPARE BED.

A friend recently gave us the following eulogy, clipped from we know not where, with the request that we help to extend its circulation. We comply, not without a strong feeling of the usefulness of such effort. It requires more than ridicule to convert the average housekeeper from her blind devotion to the traditions of her grandmothers concerning the "spare room."

Who first called them "spare beds?" Why didn't he name them "man-killers" instead? I never see a spare bed without wanting to tack the following card on the headboard:—"Notice! This bed warranted to produce Neuralgia, Rheumatism, Stiff Joints, Backache, Doctor's Bills, and Death!"

When I go out into the country to visit my relatives, the spare bed rises up before my imagination days before I start, and I shiver as I remember how cold and grave-like the sheets are. I put off the visit as long as possible, solely on account of that spare bed. I don't like to tell them that I would rather sleep on a picket fence than to enter that spare room, and creep into that spare bed; and so they know nothing of my sufferings.

The spare bed is always as near a mile and a half from the rest of the beds as it can be located. It is either upstairs at the head of the hall, or off the parlour. The parlour curtains haven't been raised for weeks; everything is as prim as an old maid's bonnet, and the bed is as square and true as if it had been made up to a carpenter's rule. No matter whether it is summer or winter, the bed is like ice, and it sinks down in a way to make one shiver. The sheets are slippery clean, the pillow-slips rustle like shrouds, and one dare not stretch his leg down for fear of kicking against a tombstone.

Ugh! shake me down on the kitchen floor, let me sleep on the haymow, on a lounge, stand up in a corner, anywhere but in the spare bed! One sinks down until he is lost in the hollow, and foot by foot the prim bedposts vanish from sight. He is worn out and sleepy, but he knows that the rest of the family are so far away that no one could hear him if he should shout for an hour, and this makes him nervous. He wonders if any one ever died in that room, and straightway he sees faces of dead persons, hears strange noises, and presently feels a chill galloping up and down his back.

A Novel Question as to Anæsthetics.—A curious point, which has some practical interest for medical men, has recently been decided by a French law court. A workman, who, in passing the Church of St. Eustache, had been injured by a stone which fell from the building, brought an action for damages against the City of Paris and the Church authorities. He alleged that the accident had caused paralysis of his right arm, consecutive to fracture of the clavicle. Three doctors were ordered by the Court to examine him. In order to exclude the possibility of malingering, these gentlemen proposed to conduct their examination under chloroform. The man refused to submit to this, and pleaded that he should not be compelled to undergo a proceeding which might possibly cause his death. His counsel argued that though it might be legal to anæsthetize against his will a person accused of a criminal offence, it would be unjust to apply the same rule to a man seeking compensation for an injury he had suffered. The Court decided that whilst the medical men had the right to make whatever examination they considered necessary in the interests of justice, the plaintiff could not be compelled to submit to a test which, rightly or wrongly, he believed to be dangerous to his life or health.

Popular Science Papers

"Blessings on Science! When the Earth seemed old,
When Faith grew doting, and our reason cold,
'Twas she discovered that the world was young,
And taught a language to its lisping tongue."

—*Charles Mackay.*

THE PROS AND CONS OF VACCINATION.

By John Crowell, M.D.

The epidemics of opposition to vaccination break out with more frequency than do the visitations of the dread disease that Jenner thought he had completely conquered by his great discovery. The prejudice against vaccination assumes divers shapes, according to the fancy of individuals or communities. Sometimes in small villages, whose districts are disturbed by some anomaly in the results of the process, we find a stout opposition to an order for general vaccination, which nothing but the strong arm of the law can subdue. Sometimes a "crank," or some superficial empiric, will set up a theory, and recount the evils of the vaccine disease, that works wonders in the minds of many, and we find in every neighbourhood children who are kept out of school because of the unwillingness of parents to subject them to the dangerous process.

Again, some physician of acknowledged repute comes out with a manifesto so bold and radical against the whole theory of the prophylaxis as to have a large following, both by the secular press and by those who would gladly escape from complying with the legal requisitions concerning the operation. Just now a flutter of excitement has been produced in Albany, by the appearance of a New York physician before the Assembly Public Health Committee, who has vigorously protested against the compulsory vaccination bill. He boldly asserted his opposition to vaccination, chiefly on account of its failure as a preventive of small-pox, stating that in a practice of the last seventeen years he had examined every case of the disease that had occurred in New York City, and that in nearly every fatal case the victim had been vaccinated. He discarded the whole thing *in toto*, and advised a commission of investigation before any bill should be framed. Of course this was promptly met with the rebutting testimony of able experts, including Dr. Cyrus Edson, of the New York Board of Health, and the committee decided to report favourably to the Assembly, recommending the passage of a compulsory bill.

The objections urged against vaccination are mainly as follows:

1st. Vaccination does not protect against small-pox. Persons who have been vaccinated have the disease, and many fatal cases are recorded.

2nd. The decrease of small-pox is not owing to vaccination, but to sanitary reform. It is a filth disease, and as great cities become cleaner, under the supervision of scientific inspection, it will be finally stamped out of existence.

3rd. Vaccination is a dangerous process. It introduces syphilitic and other specific poisons into the system, and sets up conditions far more serious than is the disease it attempts to prevent.

4th. It often produces ugly sores, which are obstinate in healing, leaving great scars, which disfigure the person.

In reply to these objections, it must be admitted that vaccination has been disappointing in the extent of its prophylactic powers. Jenner, in the enthusiasm of his great discovery, claimed that he had found an absolute preventive of small-pox, but it was soon discovered that vaccinated persons were liable to a modified form of the disease, and that revaccination was necessary to ensure protection. But that vaccination does modify and prevent, we have such abundant evidence from statistics that it seems superfluous to recapitulate. The results of carefully prepared data from all parts of the world, both in the great cities and rural districts, show that the death-rate from small-pox among the unvaccinated is about 49·68 per cent., while among the vaccinated it hardly reaches 6 per cent. Some of the most satisfactory results of vaccination are found in army experience. In the Prussian army, since the enactment of the laws regulating the treatment of the epidemic, not a single death has occurred from small-pox since 1874. In Germany the results are quite as remarkable.

In great cities, like London, where the scourge of small-pox was formerly so dreadful, the results are remarkable. According to the death-rate in this great city, before the discovery of vaccination, there would have died from small-pox last year more than six thousand children. But statistics show that among the vaccinated children only twenty-three deaths occurred, out of the million of children under ten years of age in that vast metropolis.

The objection that the reduction in the mortality from small-pox is due to sanitary regulations, is not tenable, for the reduction in the death-rate from this disease is far greater than in any other class of diseases which are affected by sanitary reform, the decline being as two to one in favour of small-pox. These results are equally as favourable in the statistics of the great cities of the United States as in London.

As to the dangers incurred by the transmission of syphilitic poison, there has been much specious reasoning, and a vast amount of assertion not sustained by facts. Careful examinations from scientific experts go to show that but few well-authenticated cases have ever occurred. Dr. Laton, after carefully reviewing the different cases on record, remarks of them: "None of these alleged cases, then, have established, in my opinion, that syphilis has ever been imparted in the due and proper performance of vaccination, *i.e.*, *with the unmixed lymph of a genuine vaccine vesicle*. . . . But whether from admixture of blood, or from admixture of the inoculable secretions or products of syphilis, or through foul lancets, or in any other way, the real risks are, I believe, *entirely risks of carelessness*—risks which, with due regard to the rules which have been laid down for the proper performance of vaccination, would not occur." Therefore, all the risks and dangers attending the process of vaccination, whether from the inoculation of syphilitic poison, or the use of a foul lancet, or from any other cause, can all be avoided by a due regard to plain rules and specifications on the part of the operator. By the use of pure lymph from a healthy heifer, by the care taken to always use a perfectly clean lancet, and by the observance of all sanitary precautions on the part of the person vaccinated, the operation is practically harmless.

We know that thousands of vaccinations are yearly made without the occurrence of any accident, and hundreds of physicians pass through years of active practice, during which time they make repeated vaccinations, without meeting with a single case in question. The great weight of experience, as well as of scientific statement, is largely in favour of vaccination. It should be done in early childhood, nothing but pure animal

lymph should be used, and the instrument should be absolutely clean.

It is interesting to notice the legal regulations in different countries.

In England, the present law compels the parent to protect his child at the public expense. In Italy, no child can attend school without a certificate of vaccination. The same is true in Norway, Sweden, and Denmark. In France, the law is not explicit, although scientific men are attempting to ensure more stringent regulations. Vaccination of all raw recruits in the French army is obligatory, and to this regulation is due the immunity of the army from small-pox. In Germany, every child must be vaccinated by a physician on the September following its birth. In Japan, where small-pox was formerly an endemic disease of great virulence, Prof. E. S. Morse informs us that the dreadful scourge is coming under control, by the active measures taken by the Government to ensure vaccination.

In our own country, there is no general law governing vaccination, and the restrictions vary considerably in the several states. In many states there are no general laws, but boards of health and city ordinances regulate vaccination. The following states have no vaccinations laws: Arkansas, California, Iowa, Kansas, Louisiana, Missouri, North Carolina, Pennsylvania, South Carolina, West Virginia, Wisconsin. In Alabama, the county health officer is required to vaccinate, without charge, all who require it. In Connecticut, town boards of health may adopt measures regulating vaccination. In Delaware, the school authorities of any town may regulate the matter. In Illinois and Indiana, the state board of health has the control. Kentucky requires vaccination of all persons over twenty years of age, at their own expense. All school children must be vaccinated under the direction of the state board of health. In Maine, Maryland, Massachusetts, New Hampshire, Michigan, New Jersey, New York, Rhode Island, Ohio, Tennessee, and Virginia, there are laws of more or less stringency. In Massachusetts, there is a penalty of five dollars for neglect to comply with the provisions for vaccination, and the laws and regulations are more stringent and explicit than in any other portion of the country.

From all the evidence, from experience, and from scientific investigation, it must be conceded that vaccination, under wholesome limitations and wise legal regulations, is a safe, wise, and humane provision against the inroads of one of the most loathsome and fatal diseases that ever afflicted mankind.

Mail-carriers in Morocco are said to avoid risk of losing their places by oversleeping by tying a string to one foot and setting the end of it on fire before going to sleep. The string, they know from experience, will burn so long, and when the fire reaches their foot it is time for them to get up.

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Healthy Houses

"A happy home must be a healthy home."—*Anon.*

ROOFS.

The need of shelter was the embryo thought resultant in the house, and the most important item of architecture that supplied this want was the roof. Even at this late day in the world's life there exist tribes whose dwellings consist merely of upright posts, supporting rude thatches, which still answer the purpose of shelter from burning sun and driving rain. And if we study the ruins of the architecture of ancient peoples, whose very name is perhaps unknown, we find much the same form—the dominant roof, the supporting walls. In tropical countries the flat roof has always held the highest place in the regard of the builders, and indeed has controlled the style of the architecture. In India the roof proper is covered with cement or tiles, and in Palestine earth answers the same purpose. In ancient Greece marble was often utilized in the construction of this portion of the temples and other public buildings. The slabs were grooved in such a way as to make the finished roof perfectly water-tight, and so well was the work done that specimens of it are still extant, notably in the Choragic monument of Lysicrates at Athens. Another roof of marvellous beauty is that of the Mausoleum of Theodoric at Ravenna, which is a dome, cut from a single block of stone thirty-six feet in diameter.

The higher types of Grecian architecture had gable roofs, with very slight pitch, as is known by all who have given any attention to the subject.

The Normans and Saxons, as indeed all of the northern people, built their houses with more or less steeply inclined roofs, the object being to obviate the results of the severe storms to which they were accustomed. The Gothic roof is the extreme type of this style, and lends itself to a greater variety of needs than any other.

Modifications of these two styles are found in the gambrel roof, the Mansard roof, and in the nondescript affairs so frequently used by those who have forgotten that oddity is not necessarily beauty, and that there is a certain "adage of the schools" which upholds the search for the eternal fitness of things.

There are still to be seen, alas! houses whose lack of symmetry would make the angels weep, and gambrel roofs surmount Doric columns, while the stately Mansard roof is found in company with Queen Anne ornamentation of the most gingerbready sort, or a Gothic bay is thrown out upon the side of a house otherwise purely Grecian.

But these are crying evils, against which the "common sense of most" must be levelled ere they will down. Individuality of expression is not necessarily monstrous, although too frequently so.

But to return to our roofs, whither, were we in Oriental lands, we might climb to get a breath of purer air or to see something not so easily visible through the latticed windows. Readers of *Ben Hur*—and that means everybody, for he who has not will not be likely to read these classic essays—will recall to mind the scene upon the roof of the house, where the hero stood while the troops were passing, and how the falling tile won for him the fate of a galley slave. Then there is the Bible story of Peter on the roof of the house of Simon the tanner, who saw the thrice-repeated vision that made of him a liberal Christian.

To the roof of the Eastern house the household

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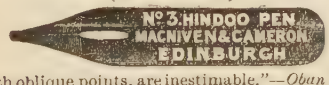

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The price of numbers 1–156 has been increased to 4d. each, as, in consequence of the great demand for them, they are now nearly out of print. Nos. 157 to date may be had, price 2d. each.

LONDON: A. P. WATT, 2, PATERNOSTER-SQUARE, E.C.

frequently repairs at the twilight hour, after the intense heat of the sun is over, and therefore it is not strange to find many stories and traditions clinging about this part of the building. The pleasantest part of life in the tropics is the cool of the day, the "gentle twilight after burning heat." In Western climes, and especially in the "cold, cold north," there is more midday activity, and the demand is for covering from storm, rather than for a place of recreation. Life to the Northerner is more work-a-day—even his pleasures take the form of violent exercise. Imagine, if you will, a Hindoo base-ball club; a tennis court in Jerusalem; a game of football in Morocco. On the other hand, what would be thought of our merchant or manufacturer who would spend the greater part of the day in dozing, awakening in the cool of the day to mount a roof to make love in indolent fashion to some dark-eyed beauty? Why, even the laziest man here pretends to be active, though in his heart of hearts he hates to work. Such is the influence of public sentiment.

But to bring our subject down to modern times, we find that there are various articles used for roofing purposes, such as slate, shingles, tin, tar, and straw; for in our mother country, and in the rural districts, the thatched roof still obtains. That this style is very ancient we may well believe. Specimens of the thatches of the time of the Incas are in existence. This style is probably the direct outgrowth of the earlier manner of massing tree branches to keep out the sun and the rain, those two warring elements whose greatest delight is to pierce the weak points in the panoply of human self-sufficiency. From an artistic point of view the thatch is eminently successful, but when divested of the glamour of romance it is frequently found to leak. So do other kinds, it must be confessed, although roofing paper, heavy planks, and best grades of materials be used. Perhaps the tin roof, if well jointed, is the best for purposes of use, but it can hardly lay claim to overwhelming beauty, and is therefore seldom used where the looks are of importance. An added charm to the tin roof is the musical sound of the falling rain-drops coming in contact with it, most highly appreciated when one is trying to rest from the arduous labours of one day, in preparation for the duties of another.

Slate is best for public and private buildings, as it offers the best protection against fire, although for flat roofs asbestos is incomparable. This is, however, largely a matter of choice. Iron and other metals are also used for this purpose, and the world-famous Crystal Palace was covered with glass as are many other similar edifices.

There is one style of roof not yet mentioned, and that is the sloping shed roof, a slide down which ranks one grade higher in the scale of boyish enjoyment than a ride down a balustrade, because not quite so easy of attainment.

Lovers of Longfellow will recall

"The old Dutch lantern,
Tall, pierced with holes, and roofed, like the top of a lighthouse,"

and in mediæval romance the roof finds place in many thrilling scenes.

There is one roof whose style is much the same as it was in days of old, and that is the roof of the mouth, a compromise between the two grand divisions of architecture, but unquestionably one of the most important of all.

There are not as many varieties of roofs as there might be, though there are Rufuses, who may be put in this category; but if we come not soon to a conclusion, some one may desire to "raise the roof."

Jottings from the Journals

"Th' ingredients of health and long life are
Great temperance, open air,
Easy labour, little care."—*Sir Philip Sydney.*

The Art of Eating.—There is little if any doubt that cooking has been employed by man in the preparation of food from the remotest ages. It is probable also that empirical ideas of what conduces to comfort in diet early formed the basis of a gastronomic art not without some relation to physiological truth. It has been reserved for later times, however, and for civilized man, to discover and formulate a regular method of dining. By a process of natural selection, the work of elaborating this system has in great measure passed into the hands of our French neighbours, who have thus been able to develop an art characteristically their own. Our simpler national customs relating to the table have, in common with those of most other peoples, attracted less attention, though it is not likely that they will ever disappear. It is needless here, however, to discuss in detail each local peculiarity. We should rather aim at understanding those common principles which underlie all rightly constituted systems, and give to each its value as an aid to wholesome nutrition. The time of eating is a matter of no small consequence. This is to some extent subject to individual convenience, but we may take it that as a general rule not less than five hours should separate one meal from another. The short interval of rest usual after meals will commend itself as being in strict accordance with physiological necessity. The quantity and quality of food taken also require careful attention, and these again must be regulated by reference to the work to be done by a given person. Some difference of opinion has always existed as to the proper daily allowance of meat. We shall probably do justice to the digestive powers of most persons, however, by advising that only one substantial meat meal be taken daily. More than this would tend, if continued, to overload the tissues with digestive products, and less would hardly suffice for full nutrition. Drink, if alcoholic, should be sparingly taken, or not used at all. Cookery has in these days been elaborated almost to excess. Variety and delicacy are carried to an extreme, and we should probably gain rather than lose if plainness combined with care were adopted as our rule of practice in such matters.—*Lancet.*

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Infant Life Insurance.—Statistics have been so often quoted both for and against the present system that we do not think it useful to rely upon them either way. Whenever facts, as distinguished from statistics, are brought forward against the present system, the supporters of that system always discount the facts in favour of statistics; but it is only by facts we can judge. Nearly all medical men in general practice can call to mind facts which have caused them to connect deaths of children with their insurance. Judges and coroners have called attention to the same thing. Therefore we cannot but think that there is something very defective in a system which does, although not in a majority of cases, yet still in a substantial minority, allow this state of things to exist. Friendly societies, as distinguished from the insurance companies which are registered under the Friendly Societies Act, do not insure children of persons other than their own members, and it is asserted by those societies, and we think with truth, that no cases of infanticide or suspected infanticide have occurred where

the insurance was with a friendly society. The reason, no doubt, for this is that the members have a certain supervision over each other. A Bill to regulate infantile insurance, supported by Mr. A. D. Provand, M.P., has been read a first time in the House of Commons, and although it has not yet been printed we are given to understand that its object is to permit the insurance of funerals with friendly societies, and perhaps burial clubs, but not with insurance offices; that the sum insured shall not permit a profit to be made by those who receive the money under the policy, and that the society should themselves undertake the funeral. We would further suggest, in all cases where a child is insured in any society, that notice should be given to the coroner in order that some inquiry should be made into the circumstances of each death, and that, if necessary, an inquiry might then be held. This would involve no hardship on the parents, and the principle has already been adopted under the Infant Life Protection Act. It is believed that medical men sometimes give, unduly and without thought, certificates of death where their knowledge as to the primary cause of death is necessarily imperfect, and we think that it would be a great check upon neglect if medical men more often declined to give certificates until the matter had been reported to the coroner, who would then make inquiries, and in his discretion hold an inquest. It is stated that the impression that a medical certificate can be readily obtained prevents many parents calling in proper medical assistance until the last moment. As regards the question of thrift which is urged by the insurance companies in favour of their system, it would seem to be a matter for the serious consideration of the Legislature, for the protection of the industrial and working classes, whether it is fair to those classes that so much of their hard-earned money should be spent in commission and management, as is proved by the figures given before the House of Commons Committee.—*British Medical Journal.*

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The Need for Cremation.—At Cambridge, in 1880, I pursued the question of contagion further, and examined it in connection with burial, not above ground but under the earth, referring to Darwin's observations "on the formation of mould," made when he was a young man. I will read now the passage exactly as I read it at Cambridge, to show how curiously confirmatory of the then recent conclusions of Pasteur were the facts observed by Darwin: "In Darwin's paper, read at the Geological Society of London, in 1837, he proved that in old pasture-land every particle of the superficial layer of earth overlying different kinds of sub-soil has passed through the intestines of earth-worms. The worms swallow earthy matter, and after separating the digestible or serviceable portion, they eject the remainder in little coils or heaps at the mouth of their burrows. In dry weather the worm descends to a considerable depth, and brings up to the surface the particles which it ejects. This agency of earth-worms is not so trivial as it might appear. By observation in different fields, Mr. Darwin proved, in one case, that a depth of more than three inches of this worm-mould had been accumulated in fifteen years; and in another that the earth-worms had covered a bed of marl with their mould in eighty years to an average depth of thirteen inches." Pasteur's researches on the etiology of "charbon" show that this earth-mould positively contains the specific germs which propagate the disease, and that the same specific germs are found within the intestines of the worms. The parasitic organism, or *bacteridium*, which, inoculated from a diseased to a healthy animal, propagates the specific disease, may be destroyed by putrefaction after burial. But, before this process has been completed, germs or spores may have been formed which will resist the putrefactive process for many years, and lie in a condition of latent life, like a grain of corn, or any flower-seed, ready to germinate and communicate the specific disease. In a field in the Jura, where a diseased cow had been buried two years before, at a depth of nearly seven feet, the surface-earth not having been disturbed in the interval, Pasteur found that the mould contained germs which, introduced by inoculation into a guinea-pig, produced charbon and death. And, further, if a worm be taken from an infected spot, the earth in the alimentary canal of the worm contains these spores or germs of charbon, which, inoculated, propagate the disease. And the mould deposited on the surface by the worms, when dried into dust, is blown over the grass and plants on which the cattle feed, and may thus spread the disease. After various farming operations of tilling and harvest, Pasteur has found the germs just over the graves of the diseased cattle, but not to any great distance. After rains or morning dews the germs of charbon, with a quantity of other germs, were found about the neighbouring plants; and Pasteur suggests that, in cemeteries, it is very possible that germs capable of propagating specific diseases of different kinds, quite harmless to the earth-worm, may be carried to the surface of the soil ready to cause disease in the proper animals. The practical inferences in favour of cremation are so strong that, in Pasteur's words, they "need not be enforced." It would be easy to show that cremation of diseased animals would be a more certain mode of destroying the seeds of infective diseases than burial in quicklime; and that simple burial in earth is a very certain mode of preserving these seeds of the germs. They may or may not be destroyed, wholly or partially, by the process of putrefaction—probably they are often wholly destroyed. But occasionally they are preserved with all their destructive powers for many years. I have more than once cited a very remarkable case on the authority of Mr. Wheelhouse, of Leeds, where the seeds of scarlatina germinated after having been buried for thirty years. In a Yorkshire village, part of a closed graveyard was taken into the adjoining rectory garden. The earth was dug up and scarlatina soon broke out in the rectory nursery, and from thence spread over the village. It proved to be of the same virulent character as the scarlatina which thirty years before had destroyed the villagers who were buried in the precise part of the churchyard which had been taken into the garden and dug up.—*Sir T. Spencer Wells.*

To Keep off Mosquitoes.—Take a small quantity of a 2 per cent. carbolic acid solution, and sprinkle sheets, coverlets, pillow, and bolster on both sides, the edges of bed curtains, and the wall next the bed. The face and neck may also be slightly wetted with the solution. Not a single gnat or mosquito, it is said, will come near.

Castor Oil *versus* Olive Oil as Lubricator.—The Italian Admiralty have recently caused to be carried out a number of experiments with a view to testing the comparative merits of castor oil and olive oil for lubricating purposes on board ship. From the results obtained, they have given orders that henceforth all exposed parts of machinery are to be lubricated exclusively with castor oil, while mineral oils are to be used for cylinder and similar lubrication.

Our Bookshelf

"Reading maketh a full man."—*Bacon.*

THE HUMAN FOOT.

The Human Foot, its Form and Structure, Functions and Clothing. By Thomas S. Ellis, Consulting Surgeon to the General Infirmary at Gloucester, (London: J. and A. Churchill. 1889.)

Mr. Ellis is well known as an authority upon all matters connected with the physiology of the feet, and his papers, published in the *Lancet*, have been frequently referred to in the pages of Health. The present work may be described as a very full and complete monograph on the foot and its physiology. The work, it may be said, is really an artistic production. In printing and binding it leaves nothing to be desired, and the page and other illustrations are models of clearness and exactness. The author gives a full and popularly written description of the foot. Every detail in its osteology and muscular structure is clearly given. The causes of common foot-deformities are duly discussed, and the book should possess a deep interest for bootmakers, seeing that Mr. Ellis enters in detail into the proper method of making lasts and of fitting the feet with coverings in the shape of boots and shoes. There is nothing technical in this volume which an intelligent workman cannot or may not understand, and it is the merit of Mr. Ellis's writing that it appeals to the popular understanding while it sacrifices no principle of scientific correctness or anatomical detail. One good this book may serve to accomplish, and that is the arousing of attention to the abnormalities of boots and shoes when regarded in relation to the foot and its structure. That it will convince every one is not to be expected; but few will peruse its pages who will not have their ideas enlarged regarding the series of curious and interesting functions which we denote under the common name of walking. Mr. Ellis's volume is a worthy companion to the famous Bridgewater treatise on the hand.

PHYSICAL CULTURE.

Strength: How to get Strong and Keep Strong, with Chapters on Rowing and Swimming, Fat, Age, and the Waist. By Richard A. Proctor. (London: Longmans & Co. 1889.)

That the late Mr. R. A. Proctor was a many-sided man was well known to his friends and acquaintances, and a perusal of his works serves only to confirm this impression. While specializing astronomy, it was surprising to find Mr. Proctor possessing a more than average acquaintance with many other subjects, biological and geological alike. The work before us is a reprint, if we mistake not, of a portion of the author's book formerly published under the title of *Strength and Happiness*. It deals in an exhaustive manner with the subject of physical education, happily now becoming one of practical and public interest. The motto from Charles Reade, "Tak' care o' your carkus," was put by that author into the mouth of Dr. Sampson, that eccentric practitioner who figures in *Hard Cash*. It really involves the great principle, at once, of hygiene and manly sports. If the "carkus" is duly cared for, most, if not all, the good things of life will follow in the wake of this personal sanitation. The book is eminently readable and interesting. Mr. Proctor attacked the subject from an anatomical standpoint, and the effect of this treatment is to make the topic all the more practical. As an old University oar, what he had to say on rowing is well worth reading, and the volume may be heartily commended to all who value exercise judiciously carried out as a means of gaining and maintaining health.

STRATHPEFFER.

Strathpeffer Spa, its Climate and Waters. By Fortescue Fox, M.D. (London: H. K. Lewis, 130, Gower-street, W.C. 1889.)

Dr. Fox has succeeded in producing a little volume which has the great advantage over the ordinary guide-book in that it is written in an interesting manner, and gives more exact and accurate details regarding the famous Spa of the north than have hitherto been published. The work deals with the physical character of Strathpeffer; and the baths and springs are fully described. The chapters on the botany and geology of the district, and on the various excursions which may be made from Strathpeffer, are welcome additions to the the volume. Such a guide is a necessity for every visitor to this famous resort.

SOME CONTINENTAL GUIDE-BOOKS.

A series of cheap and reliable hand-books, suitable for travellers and tourists, have been issued from 125, Fleet-street, and 61, Regent-street, London, W. They are edited by Percy Lindley, and describe in an eminently practical manner the various features of the scenery, &c., of those portions of the Continent which can be so easily and quickly reached by the excellent route of the Great Eastern Railway, *viâ* Harwich. Of the high character of this route we can speak from a long personal experience; and as the Continent is readily reached either from London or from the north, *viâ* Harwich, we recommend intending tourists to give the Great Eastern Railway Co.'s route a trial. Its cheapness constitutes an important feature of this route. Armed with the hand-books under notice, the holiday-maker cannot fail to enjoy a short or extended tour. *Walks in Holland* is an excellent guide to both walking and boating tours in the land of dykes, while the penny hand-books, entitled *A Trip to the Ardennes*, and *The Hartz Mountains*, are really marvels at the price. A useful penny book, entitled *Tourists' Travel-Talk*, contains a vocabulary in English, French, and German, and gives a variety of other useful information to holiday-makers.

PRISMS.

The Clinical Uses of Prisms and the Decentering of Lenses. By Earnest E. Maddox, M.B. (Bristol: John Wright & Co. 1889.)

This volume will appeal to those who are in any way connected with the treatment of eye-affections, and with the adjustment of spectacles for corrections of aberrations of vision. The author writes with a full knowledge of his subject, and his work should be found in every optician's hands.

Magazines of the Month.—*Harper's Magazine* for August is a bright number, and among other contents contains a most pathetic story, entitled "Mollie." An illustrated article on "The Fan" will interest lady readers, while "The Kremlin and Russian Art" is a paper dealing exhaustively with the treasures of the well-known churches. *Belgravia* and *The Gentleman's Magazine* are, as usual, most readable. The fiction in the former is of an even higher order than usual in this excellent magazine. From Messrs. Cassell we have received Part X. of the *New Popular Educator*, and Part XXXIV. of the *Illustrated History of England*. The *Season* for August is full of information regarding the latest styles in summer toilettes. It is always a welcome periodical to those who wish to know how the fashionable world dresses.

IMPORTANT ANNOUNCEMENT.

BONUSES TO SUBSCRIBERS TO "HEALTH."

HEALTH, as our readers are aware, may be obtained of all Booksellers and Newsagents, and at the Railway Bookstalls, on the day of publication. It may also be ordered from the PUBLISHER, 2, Paternoster-square, London, E.C., who will send the journal, post free, for a year, on receipt of postal orders for 10s. 10d.

As many of our readers who live in remote districts prefer to obtain HEALTH from the Publisher direct, and as we are desirous of increasing the already large number of subscribers who give us a yearly order for the journal, we offer the following FREE GIFTS and BONUSES to all who subscribe to HEALTH for one year or longer :—

(1.) To each Subscriber who remits 10s. 10d. to the Publisher, entitling him (or her) to receive one copy of HEALTH, post free, for one year, we shall present a copy of Dr. Andrew Wilson's work, entitled "A Manual of Health Science" (Longmans & Co.), value 2s. 6d.

(2.) To each subscriber who remits 21s. 8d., entitling him or her to receive two copies of HEALTH weekly, post free, for one year (or one copy for two years), we will present Dr. Richardson's "Ministry of Health" (Chatto & Windus), value 6s. The copies of HEALTH so ordered may be posted to separate addresses.

(3.) To each person who subscribes 32s. 6d., for three copies of HEALTH, post free, weekly, for one year, we will present the volume by Dr. Richardson mentioned above, and also the handsome, illustrated book entitled, "Studies in Life and Sense," by Dr. Andrew Wilson (Chatto & Windus), value 6s.—being a free gift of the total value of 12s.

The bonus last mentioned will also be presented to anyone who succeeds in obtaining three yearly subscribers to HEALTH, and who remits to the Publisher the sum of 32s. 6d., together with the names and addresses of the persons to whom the copies are to be posted each week.

As the literary gifts above-mentioned constitute books containing solid and reliable information regarding health and other matters of popular scientific interest, it will be seen that the above scheme, while intended to increase our already large circulation, also offers distinct advantages to new subscribers who guarantee by their subscriptions a year's support to this journal. All communications regarding subscriptions and other purely business details connected with HEALTH should be addressed directly to the PUBLISHER, 2, Paternoster-square, London, E.C., and *not to the Editor*.

To expel mosquitoes, take of gum camphor a piece about one-third the size of a hen's egg, and evaporate it by placing it in a tin vessel and holding it over a lamp, taking care that it does not ignite. The smoke will soon fill the room and expel the mosquitoes, and they will not return, even though the windows should be left open all night.

JAPAN WAX is obtained from a tree which is found in China, Japan, and throughout the East Indies generally. In the Japanese language it is called haje, or haze. The tree commences to bear fruit when five or six years old, and increases its product every year till at fifty years a single tree will produce 350 pounds of berries, from which 70 pounds of wax can be obtained. The wax is formed in the middle of the berry between the seed and the skin, like the pulp of the grape.

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RECENT TESTIMONIALS.

GALVANISM *v.* RHEUMATISM.
203, Corfield-street, Bethnal-green-road, London, 22nd July, 1889.
Dear Sir,—I consider your Galvanic Belts are worth their weight in gold, and I shall always recommend them to my friends. I have entirely recovered the use of my leg; and my mother, who is seventy-three years of age, has been cured of rheumatism. I cannot speak too highly of your treatment, which has been a blessing to my whole family, and some friends in Lowestoft tell me they would not be without one of your Belts in the house for any money.—Yours respectfully, (Mrs.) A. THURSTON.
Mr. J. L. Pulvermacher, 194, Regent-street, W.

GALVANISM *v.* SEVERE PAIN AND EXHAUSTION.
Stratton, Cornwall, 16th July, 1889.
Dear Sir,—I am happy to inform you that the patient for whom I purchased your Galvanic Belt experienced most decided relief from pain in twenty-four hours, and has since continued to progress. Before trying your treatment the patient was in a state of continual pain, at times agonizing, and we felt life could not much longer endure the strain. The patient is also greatly improved in general health, and is wonderfully better in every way. Privately I shall be willing to answer inquiries—stamped envelope being enclosed.—Yours faithfully, W. R. H. WILLETT.
Mr. J. L. Pulvermacher, 194, Regent-street, W.

GALVANISM *v.* NERVOUS DEBILITY & HEADACHE.
Alvaston, Derby, 6th July, 1889.
Gentlemen,—I am pleased to say that I have derived great benefit from your Galvanic treatment, and when talking to any one in our town or wherever I may be, I always recommend you, because I have now proved your Galvanic Belt to be the best remedy for nervous headache and nervousness generally that I have ever tried.—Yours very truly, W. S. WOODWARD.
Messrs. Pulvermacher & Co., 194, Regent-street, W.

GALVANISM *v.* LOCAL WEAKNESS.
Finchley, near London, June 23rd, 1889.
Dear Sir,—In October last you supplied me with a Chain Battery Combined Band and Belt, from which it is no exaggeration to say I experienced relief in a few days, and in five months was completely cured of the local weakness from which I was suffering for more than three years. I had tried various remedies without effect, but your method operated at once. It is simple, natural, and safe, and I only wish the thousands who, it is grievous to think, are suffering from these dire maladies, could hear of and give a a trial to your treatment.
Allow me to thank you again most sincerely for the kindness which you personally showed me at a critical and perplexing moment. I shall not easily forget it, but doubtless you are compensated by that generosity of heart which brings its own reward. I enclose my card, and you are at liberty to publish this and to refer any one to me privately, but I particularly desire my name to be suppressed publicly.—Gratefully yours, "Z."
Mr. J. L. Pulvermacher, 194, Regent-street, W.

GALVANISM *v.* NERVOUS EXHAUSTION.
Southampton, June 22nd, 1889.
Dear Sir,—I cannot speak too highly of your Galvanic Appliances for all kinds of Nervous Exhaustion, &c., and only wish, as there are so many now suffering from these and other complaints, that they would give your Galvanic Belts a trial, as I feel by them, and the blessing and help of our gracious God, I have been kept alive.
I send you this unasked for, and if it meets the eye of any who are now suffering I shall be pleased to answer any questions if you will give my name and address privately to any inquirers.—Yours faithfully,
J. L. Pulvermacher, Esq., 194, Regent-street, W. S. I. S.

GALVANISM *v.* SCIATICA.
Donnington House, Stow-on-the-Wold, June 22nd, 1889.
Dear Sirs,—I am pleased to say that the combined Electric Band you sent me for Sciatica has quite cured me.—Dear Sir, yours truly,
GEO. WHITFIELD.
J. L. Pulvermacher & Co., 194, Regent-street, W.

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All Communications for the Editorial Department (including Books for Review, Specimens of Sanitary Appliances, &c.), to be addressed to "THE EDITOR OF HEALTH," 2, PATERNOSTER-SQUARE, LONDON, E.C. *Those intended for the Publishing Office to be sent to* MR. A. P. WATT, THE PUBLISHER, *at the same address.*

RULES FOR CORRESPONDENTS.

OWING to the mass of letters which reaches us each week, we respectfully direct the attention of Correspondents, desiring replies in the LETTER-BOX DEPARTMENT of HEALTH, to the following rules:—

1. All questions are answered free of charge in the columns of HEALTH. A limited space only, is available for the insertion of replies each week.
2. All letters must be legibly addressed to "The Editor of HEALTH, 2, Paternoster-square, London, E.C.," *and to no other address.*
3. Questions to which answers are desired by post, are so replied to solely at the Editor's discretion. If no answer is sent by post, the query will be replied to in the "Letter-Box" columns of HEALTH. A stamped addressed envelope must accompany all queries to which a private reply is desired.
4. Addresses of physicians and surgeons will, as heretofore, be forwarded FREE to Correspondents on their enclosing a stamped addressed envelope for reply.
5. Correspondents are requested to write on one side of the paper only, and to make their inquiries as brief as may be consistent with clearness.
6. From the necessity of sending HEALTH to press early in the week, no Correspondent can be replied to in the "Letter-Box" columns in the same week in which the inquiry is received. Replies crushed out of any issue will be found in the succeeding number.
7. No Post Cards must be used in sending queries. Violation of this rule deprives the sender of the privilege of a reply.

QUERIES AND ANSWERS.

REPLIES: GENERAL, SANITARY, AND MEDICAL.

[Readers of HEALTH will kindly note that when back numbers of the journal are desired, the letters containing such requests and stamps for the numbers should be addressed to the PUBLISHER of HEALTH, 2, Paternoster-square, London, E.C., and *not to the Editor.*]

CYGNET.—1. The "gramme," as has been over and over again explained in HEALTH, is a Continental weight. It equals about sixteen grains English. 2. If the chemist you have consulted cannot tell you what black soap emulsionis, we advise you to apply to another and better-informed one. Any druggist will be able to make you such an emulsion.

INQUIRER.—Certainly; it would be of great service. Apply to Mr. Pulvermacher, 194, Regent-street, London, W.

A. HELEN W.—You might try what effect taking ten grains of Antipyrin in powder, or two five-grain Tabloids of Antipyrin (Burroughs, Wellcome & Co.'s) at bedtime, or when the pains are severe. If not cured, write again. Messrs. Duncan & Flockhart, of your city, will supply you with the Tabloids.

R. SMYTH.—When your symptoms are troublesome, take twenty grains citrate of potash in a tumbler of water, and repeat this dose in two hours. Avoid salt and sweet foods; and see that you avoid constipation especially by the use of the diet and Cascara recommended to "A. Barber" in last week's HEALTH. If these means fail to cure you, try the effect of using a belladonna suppository at bedtime. Any druggist will make you one, and instruct you as to its use.

T. C. BRUNTON.—[You cannot receive a reply in HEALTH of the same week as that in which your letter is received.] What you name arises simply from the fact that you do not wash the parts night and morning with soap and water, and probably you are careless of your clothing and do not change your underclothes as often as necessary. After washing, dust Woolley's Sanitary Rose Powder (advertised in our pages) on the parts which perspire.

FLORA.—Try Rowland's Kalydor; it is one of the best of applications for the skin, and is quite harmless. If not bettered, write again.

NERVES.—Take twenty grains bromide of potash in a little water at bedtime, and let your food be of light description.

HEAD.—See advice given to "Nerves." If not cured, write again.

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C. GRACE.—The Medical Battery Co., 52, Oxford-street, W., will probably be able to answer your inquiry. We have not heard of the appliance you name.

A. P. S. — Try Kronenquelle Water (advertised in our pages), and drink it regularly for some weeks. Follow also advice given to "A. Barber" in last week's HEALTH.

CINCHONA. — 1. Take Horsford's Acid Phosphate regularly for some time as a tonic, full directions are given on the bottle. 2. No: but Neave's Food would suit.

NERVOUS.—Your diet is far too meagre. You must increase the amount of nitrogenous food, and in addition take to dinner a couple of glasses of the Vino Tinto (advertised in our pages) as a suitable tonic wine. This treatment will probably cure your case.

CYCLING.—1. We prefer the trycicle for ordinary sensible exercise. Speed is, of course, secured by the bicycle; but for judicious and quiet exercise, try a good low-wheeled tricycle—such as the latest make of the Coventry Machinists' Company. 2. The advantages are general muscular exercise graduated to any degree and extent, with fresh air and mental enjoyment. Send to the Publisher of HEALTH for our articles on Cycling.

HENRY.—You may try the following:—Liquor ammonia (strong), chloroform, and oil of jasmin, of each, half an ounce; castor oil, half a drachm; spirits of rosemary, to make up four ounces. Keep in a stoppered bottle, and label, "A little to be cautiously rubbed into the hair each morning." Use also, at night, a little of an ointment, composed of Lanolin, two drachms; and oil of jasmin, half a drachm. The use of the ointment at night will prepare the hair-roots for the action of the lotion in the morning.

RUFUS.—Always glad to be of any service to you. The symptoms you name are not specially indicative of gout. They rather point to simple debility, which change of air should correct. We advise you to try a course of the Pitkeathly Water with Lithia, to be had from Messrs. Reid & Donald, of Perth, or any good druggist in your city; and for the rest, to make vegetables, for a time, a more prominent feature of your diet. Let us hear how this advice suits your case.

HEMI.—You must blame yourself that in writing before, your letter did not make clear the point on which you desired advice. We know of nothing which can effect your irregular hair growth; for if it is strictly limited to one side, the irregularity must depend on some nervous condition which we judge would be difficult to correct or amend. Any treatment adapted to tone up the nervous system might safely be tried in your case; but we are not sanguine as to the result. You may try the Bailey treatment with all safety, or such a tonic as Inman's Hypophosphites as ordered to "H. Y. M." in last week's HEALTH. We trust this full reply satisfies your wants.

ABSCESS.—Brace up your system by as long a holiday at the seaside as you can get, and take after meals, thrice daily, a dessertspoonful of cod liver oil and iron made up as follows:—Syrup of iron iodide, three drachms; gum mucilage, one ounce; cod liver oil to make up six ounces. The proper treatment in your case is preventive in its nature. Judicious sea-bathing will be likely to assist you. Margate or Ramsgate are suitable places for your case.

OMEGA.—1. Laxative only. 2. Probably Neave's Food. 3. Certainly not. The gastric juice itself contains the acid in question.

J. W. P.—Try the plan of applying Vinolia (Roberts & Co., 76, New Bond-street, London, W.) as an ointment to the parts each night; and in the morning bathe them with a little Hazeline. It is difficult to alter such a conformation once it has become established.

THOMAS R.—Use one of the "Nebulizers" (advertised in our pages) for your hay fever, and take, internally, a teaspoonful of Inman's Syrup of the Hypophosphites, in a wineglass of water, thrice daily, after meals. Go to the sea-side, and avoid the country for some weeks at least.

MABEL.—Use the "Pommade Tricophile" of the French Hygienic Society, 6, Conduit-street, Regent-street, London, W. (advertised in our pages). Wash the hair once a week with Bayley's Soap.

G. E.—Try some Salicylic Cream applied to the corn, by way of softening the skin-tissues, and then pare the corn in the morning. Repeat this process as often as needed. Wear a woollen sole inside your boot to avoid pressure on the corn; or wear thick stocking and roomy boots.

TOPAZ.—Try injecting a teaspoonful of glycerine as directed in HEALTH, No 285, in the article on the use of glycerine in constipation. This may probably relieve your symptoms. If this treatment does not suffice, try applying a little pure Hazeline to the affected parts as a lotion.

F. M.—Press out the blackheads with your fingers or a watch-key, then sponge the parts with eau de Cologne or toilet vinegar. Your skin-action is deficient. Take a hot bath twice a week at bedtime, and plenty of open air-exercise, and avoid excess of fatty foods. Read also article on blackheads in HEALTH, No. 199, to be had, price 2½d., post free, from the Publisher.

A. R. — Buy Pye Chavasse's books, "Advice to a Wife" and "Advice to a Mother," both published by Messrs. Churchhill, 11, New Burlington-street, London, W., price 2s. 6d. Order of any bookseller. They are very useful manuals, and are plainly written.

JOHN H.—For the relief of the itching in your case try the following: Carbolate of soda, a drachm and a half; glycerine, twenty-five drachms; eau de Cologne, nineteen drachms; and water, seventy-five drachms. Mix, and apply to the parts as a lotion thrice daily. Wash the parts with Vinolia Soap only.

SEAM.—The heartburn may be quickly relieved by your taking Vichy Pastilles. Another remedy is: Bicarbonate of soda, one drachm; tincture of calumba, six drachms; dill. water to six ounces. Mix. A tablespoonful to be taken every three hours. Avoid all acids, fruits, sugar, pastry, &c.

TINKER.—You should try Vinolia as an application, to be had from Messrs. Roberts & Co., 76, New Bond-street, London, W.

NOX.—Try the effect of taking two five-grain Tabloids of Antipyrin (Burroughs, Wellcome & Co.'s, Snow-hill, London, E.C.) between your meals, once or twice daily, and note the effects of this treatment on your ailment.

L. E.—Read carefully the pamphlet, "A Lecture to Young Men" (post free, for 1s. 1d., from Mr. Renshaw, 356, Strand, London, W.C.), and follow out the directions therein given regarding diet, the use of tonics and cold sponge baths.

C. E. M.—The swelling is due to *goitre*. You must apply to a good physician in London, and be guided by him in the treatment of your case.

FORS CLAVIGERA. — Take a dose of Lamplough's Pyretic Saline in the morning, and follow out the other food directions named. You will get quite well in time. Take a cold sponge bath each morning, and use brisk friction thereafter with Wilson's Hygienic Towels. See, also, that you take plenty of open-air exercise.

A. BLAIR.—A brown hair-dye may be made as follows:—Pyrogallic acid, half an ounce; sodium sulphate, half a drachm; rectified spirit, one ounce; water three ounces. Dissolve the acid in the spirit, the sulphate in the water, and mix.

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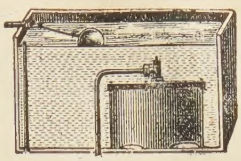

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